DETAILED ESTIMATE

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Improvements to Roads and Drains at Deshabanndunagara and Surrounding areas in Ward No. 09 (Vidyaranyapura)

								Estimation Cost.Rs	**4700000.00**
Sl No	**Description of work**		**Mesurement**				**Qty**	**Rate**	**Amount**
		Unit	**No.**	**L**	**B**	**D**			
1	**Removing and refixing** stone slabs of drains and pointing in CM (1:3) (P.No-27,I No-5.33)								
		Sqm							
	BS slab of Drain								
	Open Drain (Sides & Bottom)	**Sqm**	Width=Perimeter of Drain in U Shape						
	ChikkaVenkatappa Layout								
	1st Main Road	Sqm	2	154.00	1.35		415.80		
					Total		**415.80**		
	Deduct 30% for Missing/Damaged						**124.74**		
	Consider 70% Qnty for Removing & Refixing						**291.06**		
	Basic rate	105.00							
	Area weightage 6%	6.3							
	Sub Total	**111.30**							
	Total						**291.06**	**111.30**	**32395.00**
2	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. (PWD SR 21-22 Vol -I Pg No 5 item no 1.4.1)								
	New Drain	**Cum**							
	Deshbandhu Nagara								
	2nd Main Road	Cum	2	135.00	1.10	0.90	267.30		
	Cross Road	Cum	1	40.00	1.40	1.20	67.20		
	For Culvert								
		Cum	3	6.00	1.40	0.95	23.94		
	Drain Desilt	**Cum**							
	ChikkaVenkatappa Layout								
	1st Main Road	Cum	2	154.00	0.45	0.45	62.37		

Sl No	Description of work		Mesurement				Qty	Rate	Amount
		Unit	No.	L	B	D			
	For Flagging Coarse	**Cum**							
	ChikkaVenkatappa Layout								
	1st Main Road	Cum	2	154.00	0.15	0.20	9.24		
	Basic rate	186.00							
	Area weightage 10%	18.60							
	Sub Total	**204.60**							
	Total						**430.05**	**204.60**	**87989.00**
3	Providing granite slabs of selected quality roughly dressed having a size of 7.5cms thick and fixed in cement mortar (1:6) including fixing curing etc., complete.(P.No.27,I.No.5.31.1)								
		Sqm							
	Provide 30% new BS Slab	From Item No.1					**124.74**		
	Basic rate	700.00							
	Area weightage 6%	42							
	Sub Total	**742.00**							
	Total						**124.74**	**742.00**	**92558.00**
4	Providing and laying in position plain cement concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (PWD SR 2021-2022 Vol -I Pg 15 item no 2.1.3)								
	For Drain	**Cum**							
	Deshbandhu Nagara								
	2nd Main Road	Cum	2	135.00	1.10	0.15	44.55		
	Cross Road	Cum	1	40.00	1.40	0.15	8.40		
	For Culvert								
		Cum	3	6.00	1.40	0.15	3.78		
	Basic rate	5752.00							
	Area weightage 10%	575.20							
	Sub Total	**6327.20**							
	Total						**56.73**	**6327.20**	**358943.00**

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
5	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) (PWD SR 21-22 Vol -I Pg 17 item no 2.4.2)								
	Drain								
	Bottom Raft	**Cum**							
	Deshbandhu Nagara								
	2nd Main Road	**Cum**	2	135.00	0.90	0.15	36.45		
	Cross Road	**Cum**	1	40.00	1.20	0.15	7.20		
	Side Wall	**Cum**							
	Deshbandhu Nagara								
	2nd Main Road	Cum	4	135.00	0.15	0.60	48.60		
	Cross Road	Cum	2	40.00	0.15	0.90	10.80		
					Sub Total		**103.05**		
	Culvert								
	Bottom Raft								
		Cum	3	6.00	1.20	0.20	4.32		
	Side Wall								
		Cum	6	6.00	0.20	0.60	4.32		
					Sub Total		**8.64**		
	Basic rate	6256.00							
	Add 5% for Shuttering	312.80							
		6568.80							
	Area weightage 10%	656.88							
	Sub Total	**7225.68**							
	Total						**111.69**	**7225.68**	**807037.00**
6	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications. MORTH Specification NO.1600&2200 (PWD SR 21-22 Vol -III Pg 99 item no 13.1) issue Rate								
	For Drain	Cum					103.05		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
		kg	Steel assumed 60Kg/Cum of Concrete				6183.00		
		tonne					**6.18**		
	For Culvert	Cum					8.64		
		kg	Steel assumed 90Kg/Cum of				777.60		
		tonne					**0.78**		
	Basic rate	103329							
	Area weightage 10%	10332.9							
	Sub Total	**113661.90**							
	Total						**6.96**	**113661.90**	**791156.00**
7	Providing and Fixing pre cast covering **Slab** made out of CC 1:2:4 with **10cm thick** and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	New Drain Cover Slab	**Sqm**							
	Deshbandhu Nagara								
	2nd Main Road	Sqm	2	135.00	0.90		243.00		
	Cross Road	Sqm	1	40.00	1.20		48.00		
	For Flagging Coarse								
	ChikkaVenkatappa Layout								
	1st Main Road	Sqm	2	154.00	0.90		277.20		
	Data rate	**2337.00**							
	Total						**568.20**	**2337.00**	**1327884.00**
8	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	Culvert Cover Slab	**Sqm**							
		Sqm	3	6.00	1.20		21.60		
	Data rate	**5418.00**							
	Total						**21.60**	**5418.00**	**117029.00**
9	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. 1;2;4(The cost of steel reinforcement & formwork to be paid separately) (PWD SR 2021-22 Vol -I Pg 17 item no 2.4.1)								

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Flagging coarse PCC	**Cum**							
	ChikkaVenkatappa Layout								
	1st Main Road	Cum	2	154.00	0.15	0.15	6.93		
	Flagging coarse Coping								
	ChikkaVenkatappa Layout								
	1st Main Road	Cum	4	154.00	0.15	0.10	9.24		
	Basic rate	6096.00							
	Area weightage 10%	609.60							
	Sub Total	**6705.60**							
	Total						**16.17**	**6705.60**	**108430.00**
10	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. (PWD SR 2021-22 Vol -II Pg 17 item no 6.33)								
	Flagging coarse	**Sqm**							
	ChikkaVenkatappa Layout								
	1st Main Road	Cum	4	154.00		0.40	246.40		
	Basic rate	1067.00							
	Area weightage 10%	106.70							
	Sub Total	**1173.70**							
	Total						**246.40**	**1173.70**	**289200.00**
11	**Loading and Unloading of Stone Boulder**/Stone aggregates/ Sand/Kankar/Moorum. (Tipper 14 m3) (PWD SR 2021-22 Vol-III Page No.3, Item No.1.1C)								
	Qty Vide frm Item No-2+10	**Cum**					**430.05**		
	Total						**430.05**	**81.40**	**35007.00**
	Basic rate	74.00							
	Area Weightage 10%	7.40							
	Total	**81.40**							
12	**Cost of Haulage** Excluding Loading and Unloading Taking output 18 t load and lead 10 km = 180 t.km (PWD SR 2021-22 Vol-III Page No.3, Item No.1.4B)								
	Qty frm Item No-2+10	**t.Km**		430.05	1.28		**550.46**		

Sl No	Description of work		Mesurement				Qty	Rate	Amount
		Unit	No.	L	B	D			
	Total						**550.46**	**115.50**	**63579.00**
	15Km 7*15	105.00							
	Area Weightage 10%	10.50							
	Total	**115.50**							
								Grand Total	**4111207.00**
								GST Charges (12% of estimated cost)	**493345.00**
								DPR Charges (1% of estimated cost)	**47000.00**
								Project management And Consultancy Charges(1% of estimated cost)	**47000.00**
								Miscellenious and rounding	**1448.00**
								Total Amount	**4700000.00**
								RUPEES FORTY SEVEN LAKHS ONLY	

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2018-2019,PWD 2021-2022, Issue RateS and Data Rates.

Assistant Engineer
Ward No. 09

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub Division
Bruhath Bengaluru Mahanagara Palike

Assistant Executive Engineer
Vidyaranyapura Sub Division

Executive Engineer
Byatarayanapura Division

Administrative Approval
Accorded For AS 47 lakhs only
Head of A/C P2178
CER NO : 09 Dt: 11.04.20

ATA CE (YNK)

Technical Sanction
Accorded For 47 lakhs only
Head of A/C P2178
CER NO : 03 Dt: 11/04/2022